

# COMBINING DIRECT INTERFERENCE ESTIMATION AND DECODER METRICS FOR IMPROVED MEASUREMENT FOR AMR MODE ADAPTATION IN GSM SYSTEMS

## Abstract of Disclosure

A method of combining a channel quality estimate for the radio channel based on direct measurement of carrier and interferer energies, and a channel quality estimate for the radio channel based on channel decoder metrics, to obtain a final channel quality estimate in terms of carrier-to-interference (C/I) ratio for the radio channel, which is more reliable, consistent and accurate than that obtained with the individual methods. After computing a direct channel quality estimate and a decoder metric-based channel quality estimate for the radio channel, confidence levels, P(direct), P(metric), are assigned to the two estimates. P(direct) is multiplied with the direct channel quality estimate and P(metric) is multiplied with the decoder metric channel quality estimate. The respective products are added to obtain the final channel quality estimate in terms of the carrier-to-interference (C/I) ratio for the radio channel.

## Figures

